(S) The problem concerned the establishment of reasonable geographic limits for each FAG's area of operations. The FANK were not noted for exercising restraint when requesting air support, and the American and General Staff planners envisioned one FAG helpfully calling in air strikes on another friendly commander's positions. The FANK General Staff solved the problem in a simple, ingenious way. The COC issued each FAG 1:50,000-scale maps for his area of operations. The COC controlled the area of responsibility of each FAG by the number of maps issued him. Without the correct map, a FAG would be unable to give proper target validation for air strike.

(S) The FAGs added another dimension of flexibility to the command and control structure. Now, these ground commanders could request air support through either Bakheng Control or a U.S. FAC; when a FAG requested air support, FANK validation of the target was inherent in the request. When an American FAC working with a FAG received a valid request, he asked for the required air support from ABCCC where the decisions on the amount and type of support were made, normally without further communication with either BLUE CHIP or Bakheng Control. The FAGs and the English-speaking radio operators were valuable assets to the FANK. Unfortunately, there were not enough of them to cover all of the forward areas, and one FAG would have to cover many areas, calling in air support for perhaps eight or ten units that were under attack.

(C) Since the radio operators were in contact with the American FACs overhead, they were much-sought-after individuals. The commanders who had
beacons. There was no B-52 beacon at either Kampaign or Phnom Penh. One
had been collocated with an F-111 beacon on the roof of the American Embassy
in Phnom Penh, but they were both removed earlier for fear that the Embassy
could be bombed accidentally. Although the precautions taken by the aircrews
made such an occurrence unlikely, a B-52 or an F-111 offset bombing system
could be set to bomb in the direct mode, i.e., to bomb the beacon rather
than the offset aim point. The repercussions which would surely have
followed such a mistake made the risk unacceptable.*

(C) Although the concept and the effective range (17 miles) of the
B-52/beacon system were nearly the same as the F-111/beacon system, the
B-52 still could not divert to immediate targets because Embassy approval
was required for each ARC LIGHT strike. Thus, the B-52s generally bombed
enemy staging areas and insurgent forces removed from TIC situations, although
they were used close to friendly positions on some occasions toward the end
of the bombing campaign when the enemy applied severe pressure on Phnom
Penh.

Support

(S) Support requirements for B-52 and TACAIR strike aircraft generated
over one half as many support sorties as attack sorties —RF-ACs for
photographic reconnaissance, KC-135s for refueling and radio relay, EB-66s
for electronic reconnaissance of possible enemy missile threats, FAC OV-10s,
and ABCCC. Seventh Air Force scheduled EB-66 electronic reconnaissance of

*It was apparently just such a mistake that caused the incident discussed
in the footnote on page 63.
the Khmer Republic in March 1973 after F-4s received radar warnings similar
to the radar emissions of surface-to-air missiles; however, the EB-66s
127 detected no threat. The relatively small air defense threat in the
Khmer Republic obviated the need for the large escort packages that were
necessary in the campaigns over North Vietnam and parts of South Vietnam
and Laos.

(S) Resupply of FANK troops and the Khmer population by USAF C-130s
continued through the summer of 1973 and, according to the Secretary of
State, would continue after the bombing halt, as would unarmed reconnais-
sance by the RF-4s. The C-130s were delivering as much as 5,000 tons
129 of cargo monthly, over one fourth of it airdropped. After August 15,
C-130s and RF-4s would be the last vestige of U.S. airpower in the Khmer
Republic.
(S) As discussed above,* the U.S. Defense Attache in Phnom Penh reported that the general military situation in the Khmer Republic had approached the critical state in March 1973. While the U.S. had withheld air support during February and the first part of March in deference to the Khmer Government's unilateral cessation of hostilities, the Khmer Insurgents, aided by the VC/NVA, had begun a campaign apparently designed to isolate Phnom Penh by closing all main arteries logistically important to that city. The enemy forces placed themselves along the Mekong River just north of Neak Luong where the river narrows. There they attacked the river convoys bringing in supplies to Phnom Penh. They did the same thing along Route 5—the "Rice Route" from Battambang. At various times they interdicted Route 4, which connects Phnom Penh to its seaport, Kompong Som. Phnom Penh was being cut off from its sources of food, fuel, and military equipment. Since the KI had not made any strong advance on the city by early April, they apparently hoped to see the capital fall as a result of their interdiction efforts.

(S) The sustained enemy interdiction effort, coupled with terrorist attacks against sensitive installations and important government personnel, had overtaxed the FANK's capabilities and driven the Army's morale dangerously low. The USDAO descriptions of the ground situations contained reports

*See pp. 27 and 34-39.
of FANK's "lack of aggressiveness" and "reluctance to initiate offensive actions." Part of the problem was in the distribution of pay to FANK soldiers, a problem which led to several demonstrations in Phnom Penh by troops demanding their pay. Even after the pay problem was alleviated in March, FANK commanders continued to report problems with morale and discipline. In one case reported by the USDAO, a paratroop brigade refused to cross the Mekong to engage the enemy south of Neak Luong, because they believed the enemy was far superior. They remained in defensive positions on the west bank "despite repeated orders and entreaties by the General Staff and a personal visit by [Major General] Sosthene Fernandez."

(S) Even when successfully encouraged to advance on enemy positions, FANK units seemed to fall into a pattern of advancing to contact and immediately falling back to defensive positions. Many times they lost their weapons to the enemy. One FAC told of a FANK unit's experience with a 105mm howitzer: the enemy would capture the cannon, use it against the FANK commander's unit until the ammunition was exhausted, and then let the FANK recapture it. When the FANK received more ammunition for the gun, the enemy would capture it again and repeat the cycle. When the FANK lost weapons and supplies to the enemy, the FACs tried to bring in air strikes to destroy the booty; however, even if the strikes were successful, the government forces lost valuable assets.

(U) An incident on 17 March added political turmoil to an already grave military situation. A disgruntled KAF pilot commandeered a T-28 and bombed the presidential palace. Lon Nol declared a state of siege the next day.
(S) In April the KI efforts to isolate Phnom Penh and the FANK's poor performances heightened the crisis atmosphere in Phnom Penh. The USDAO reported that the KI made the greatest efforts in many months to control the Mekong and to seize Takeo, about 40 miles south of Phnom Penh.

In early April, the uncertain status of the Mekong as the primary LOC to Phnom Penh prompted Brigadier General Cleland to request USAF airlift of JP-4 jet engine fuel from U-Tapao, Thailand, to Pochentong Airfield. General Cleland intended to build and maintain a five-day supply of fuel as the KI and FANK contested control of the Mekong. The airlift was part of a plan known as SCOOT (Supply of Cambodia Out of Thailand), which the JCS had initiated in November 1972 to facilitate continuation of Military Assistance Program aid to the Khmer Republic when the U.S. staging bases in South Vietnam became unavailable. (The plan called for the development of surface LOCs between Thailand and the Khmer Republic, in particular a rail line to Battambang, but it also provided for airlift of supplies in case the enemy interdicted the Government LOCs.) While General Cleland had employed only a small part of the airlift option, the implementation of that part was evidence of the enemy's pressure on the Khmer Government's LOCs.

(S) During the last week in April the enemy's advance to within artillery and mortar range of Phnom Penh nearly precipitated the evacuation of American Embassy personnel. Although Takeo on Route 2 was still in Government hands, a village only 10 miles south of the capital on Route 2 had recently fallen to the KI. The FANK had been unwilling to fight for...
the village or for other areas over the previous two months. Because of
the FANK's poor performance and the increasing enemy pressure on Phnom
Penh, the Ambassador had prepared to evacuate dependents and less-essential
personnel, at least temporarily, in case an emergency ensued. On 25
April, insurgents in considerable strength appeared on the east bank of
the Mekong just across from Phnom Penh with weapons capable of firing into
the city. Seventh Air Force targeted F-111s against the enemy positions
that evening and scheduled TACAIR strikes for the next morning. During
the evening of the 25th, Pochentong Airfield began receiving 122mm rocket
rounds. The insurgents seemed to be making a determined attempt to cut
off the city and to make escape impossible. Although F-111s were bombing
across the river at the time and the enemy artillery had not fired, the 122mm
rocket rounds were still impacting and Ambassador Swank expected an artillery
barrage at any time. He believed the Embassy and its residents would be
choice targets for the artillery. At about midnight General Vogt received
a call from the Embassy, and, at the Embassy's request, he prepared to
execute the USSAG/7AF Noncombatant Emergency Evacuation Plan, nicknamed
EAGLL PULL, which provided for the emergency evacuation of U.S. citizens,
key indigenous personnel, and certain third-country nationals from Phnom
Penh. Since C-130s could not fly into Pochentong with the airport
being rocketed, General Vogt scrambled CH-53 heavy lift helicopters from
Nakhon Phanom RTAFB to Ubon RTAFB on alert for immediate dispatch to planned
landing sites in Phnom Penh. Under the constant F-111 bombardment during
the night, however, the enemy was unable or unwilling to position their
artillery, and the threat subsided. Apparently, heavy TACAIR strikes the next morning completely broke the attack.

(S) The enemy was more determined at Takeo. The insurgents had begun a campaign in late March to take that provincial capital, and their attacks, aided by captured 105mm howitzers, increased in frequency and intensity during the first part of April. During the month the FANK forces withdrew behind an ever-shrinking defense perimeter around Takeo until the enemy was able to use 120mm mortars against the city. So sure was the NVA of the Ki's success that Radio Hanoi prematurely reported the city's fall, but the FANK, supported by intense USAF strikes, managed to hold. B-52s bombarded enemy positions well outside the defense perimeter while F-111s attacked the enemy's close-in positions, striking accurately to within 200 meters of friendly troops, day and night, during all kinds of weather. With the intense air support the FANK gained confidence and slowly took the offensive at Takeo. In May the FANK ground commander was able to expand his perimeter against the insurgent force.

(S) The experience at Takeo falsely signaled the beginning of the end of the enemy offensive as American air strikes inflicted heavy enemy casualties. The USDAO reported that during May, with high levels of U.S. air support, FANK held its ground, holding open the Mekong and RT 4. It absorbed the enemy's best effort in the Mekong corridor, cleared RT 5 of [enemy] units, but made essentially no progress in other key areas. U.S. air power again provided the critical difference, blunting the enemy's thrusts when FANK faltered and offering a protective screen behind which FANK could regroup.
Although the USDAO noted that the enemy had lacked the combat power to defeat the FANK, FANK troops were tired and discouraged by months of combat with only dim hopes of a cease-fire. Inflation, inefficiency, and corruption were depressing morale. Most important, the FANK strength was diminishing with each person lost, because new recruits were not entering the ranks. While the KI continued to impress recruits into service, the Khmer Government relied on volunteers until the summer of 1973, when it initiated conscription.

(S) The KI had suffered heavily, too. According to 7AF calculations, the enemy by mid-July had lost over 11,000 killed by U.S. TACAIR alone. This was approximately one-third their number when the insurgents started the offensive. There was no way to know the enemy losses in rearward areas where the B-52s normally bombed. Thus, having been punished severely by U.S. air strikes and unable to isolate Phnom Penh by interdicting the LOCs, the enemy apparently changed its strategy. Apparently in quest of an early victory, insurgent forces began direct assaults on Phnom Penh rather than quitting the offensive.

(S) The KI moved on Phnom Penh from the south and southwest, although they had to breach the natural defense line formed by the Prek Thnot River. By the end of July 1973, the insurgents had established some salients across the river. One salient along Route 3 threatened Pocheutong Airfield. Pouring in air strikes near the capital, General Vogt hoped the FANK could establish a stable defense line along the Prek Thnot River before the 15 August bombing deadline. Although the KI knew that U.S. air support was
to stop on 15 August, they were not content to stay low and wait out the bombing. At the end of July, the Khmer Government estimated that 30,000 enemy troops were massed around Phnom Penh in preparation for an attack.

(S) The attack had not materialized by the 4th of August and intelligence sources suggested that it would not come for some time. An insurgent informer indicated that the offensive was not going well. According to the informer, a group of KI officials from the Phnom Penh area met in mid-July and conceded that the offensive had fallen short of the goal of causing the collapse of the Lon Nol government. They intended to continue the attack but apparently agreed that the offensive had floundered because of heavy air strikes which had inflicted many casualties and significantly hindered tactical movements and resupply. General Vogt had expressed confidence in such an outcome on 20 July:

I am certainly convinced in my own mind that if air stayed in there, the enemy would ultimately be unsuccessful and think the FANK would survive indefinitely. I can't predict the future, but I would say the outlook is pretty grim . . . after the bombing stops.
EPILOGUE

(S) On 12 August 1973, a USSAG/7AF message directed the termination of "all acts of force initiated by U.S. forces" in the Khmer Republic effective at 1100 hours local time on 15 August. On the 15th the general military situation in the Khmer Republic remained a stand-off at Phnom Penh, with enemy troops still located around the capital's perimeter. However, the Khmer Government's prospects appeared better than at the beginning of the month. While American airpower had severely punished the insurgent forces during the last weeks of the bombing, General Vogt had been helping the Khmer Government high command formulate and execute a plan of defense that would partially fill the firepower void that would be left when the U.S. air support ended. In an interview on 20 August 1973, General Vogt explained that plan within the context of the events of the past two months and assessed the Khmer Government's position after the bombing halt. The transcript of that interview follows:

(S) General Vogt: When it became apparent to us that Congress was going to stop the bombing, we knew that certain actions had to be taken for the defense of Phnom Penh. We began a series of actions in this headquarters which were designed to come up with a suggested defense plan for Phnom Penh, and also actions to insure that Phnom Penh would not be deprived of its river convoys after USAF bombing support came to a halt. It became obvious to us that the convoys could not survive sustained attacks from both banks of the Mekong following the termination of bombing. Something had to be done to alter the situation on the ground. We were using as many as 160...
TACAIR sorties to support a single convoy, primarily to protect the convoys as they passed the narrows in the river.

(S) On the 4th of July we had Major General Hou Hang Sin, the J-3 [Director of Operations] of the FANK forces here [Nakhon Phanom RTAFB] at headquarters [USSAG/7AF] with selected elements of his staff to discuss plans for new activities after the bombing halt. We presented at that time a detailed plan for the defense of Phnom Penh. The plan called for setting up a defensive line around the perimeter of Phnom Penh, generally beyond the range of active 105mm howitzers, which have a range of approximately 12 miles. We indicated the points that had to be seized, held, and fortified. The plan also called for compelling the enemy to withdraw from their salients north of the Prek Thnot River on the southern front. In July, the enemy had succeeded in pushing well north of the Prek Thnot River in a salient along Highway 3, which brought them to within seven clicks [kilometers] of Pochentong Airfield. It also pushed the friendlies back in the remaining sectors, enabling the enemy to supply their 105mm field guns in the area southwest of Phnom Penh. From that vantage point the enemy was able to openly shell the city of Phnom Penh. The enemy salient southwest of the city caused the defensive lines to bow, and that put the city within field gun range.

(S) A critical element of the defensive plan was to seize the territory north of the Prek Thnot River so that major elements (specifically the 1st Division) deployed in defense of that line could be released for another major operation. That other operation was to clear the west bank
radio operators stood a better chance of receiving air support, which they claimed they needed. This created some difficulty for the U.S. FACs.

(C) When 7AF FACs ingressed over the Khmer Republic, they first checked in with the ABCCC which gave them areas and ground commanders with whom to work. Upon a FAC's initial radio contact with any ground commander, nearly all of the FANK commanders hearing the radio contact would call in for the FAC to work with them. According to the FACs, each commander invariable claimed he had troops in contact knowing that to be the highest priority situation for receiving air support. Although the FACs were aware that the TIC calls were normally exaggerated, the constant radio calls were extremely distracting and could drown out their assigned ground contacts.

If a FAC gave his contact a new frequency to use, the other radio operators would hear, switch to that frequency, and continue calling. The FAC would have to instruct his contact to give him a new frequency to which the FAC would tune without repeating it over the air. Since the PRC 25 radios used by the FACs were line-of-sight and weaker than the aircraft transmitters, fewer neighboring radio operators could hear the choice of new frequency and, thus, the radio traffic was significantly reduced on that frequency. Obviously, the U.S. FACs were as much in demand as the FANK radio operators.

(S) The slow FACs in their OV-10s were indispensible elements in the command and control of U.S. TACAIR in the Khmer Republic. Besides providing the vital link between the ground commanders and the ABCCC, the FACs visually reconnoitered targets and insured the validity of ground commanders' requests.
for air support, marked the targets, and assessed the results. FACs of the 23d Tactical Air Support Squadron at Nakhon Phnom RTAFB, operating from Operating Location (OL)-1, Ubon RTAFB, controlled TACAIR strikes outside FREEDOM DEAL during daylight hours. The FACs flew their OV-10s out of Ubon RTAFB because of that base's proximity to the Khmer Republic. Until 17 June 1973, Fast FACs flying F-4s controlled strikes in FREEDOM DEAL during daylight hours. However, General Vogt terminated that program in mid-June because, after the loss of one F-4 and a close call with another, he believed the program was costing more than it was worth, especially since the main thrust of U.S. airpower had shifted to close air support outside the FREEDOM DEAL area.

(S) As the focus of U.S. airpower changed from interdiction in FREEDOM DEAL to close air support outside FREEDOM DEAL, the lack of U.S. advisers on the ground became an acute problem. The new command and control structure helped compensate for this lack, but nothing completely took the place of U.S. advisers. General Vogt pointed out how important it was that the ground commanders understand completely the proper use of air—how to call it in, how to describe the ground situation, how to mark friendly positions, how to designate targets, how to protect their troops from the collateral effects of close air strikes, how to report results, and so on. With no advisers to help them, the FANK forces had to learn these through their own experiences. The American airmen observed them making the same mistakes again and again: these mistakes would have been quickly corrected by American advisers. The FACs tried to overcome these problems from the
air, but it was not as effective as being on the ground with the units. The FACs had a continual problem with FANK commanders who would not have their troops properly protected when receiving close air support. One FAC related a story about a ground commander who had a TIC situation and was about to receive air support (a 2,000-pound bomb). His FAC asked him if his troops were protected; the ground commander replied that they were. The FAC emphasized that the ordnance was a "big, big bomb" and that the troops should be well dug in. The ground commander assured the FAC that everyone was dug in, whereupon the FAC gave the strike aircraft permission to deliver the bomb. After the bomb hit and exploded nearly on target, the FAC asked the ground commander for an assessment of the results. The FANK commander replied that it would take some time to get that information, because his observer had been knocked out of a tree by the bomb blast and had to climb back up. Although a light story, it does illustrate the problem. A ground adviser would not have allowed the strike to proceed under the circumstances. Other incidents did not prove humorous, and the FACs were hesitant to believe some ground commanders' assurances.

Although General Vogt believed 7AF had done well to devise systems to provide air support without ground advisers, he emphasized that these systems were not as effective as advisory teams on the ground. He stated, "The lack of advisers in Cambodia is the largest single factor in making it impossible for us to achieve some of the things there that we achieved in South Vietnam and Laos regarding the proper use of air."
Convoy Protection Procedures

(C) Until the Khmer Insurgents began direct attacks on the defense forces around Phnom Penh, the post-cease-fire war in the Khmer Republic was a struggle for control of the LOCs, particularly the Mekong River between Phnom Penh and the South Vietnamese border. Phnom Penh's primary means of supply was by Mekong River convoy. Normally, three convoys each month were scheduled to travel the Mekong from Tan Chau, South Vietnam, to Phnom Penh and return. An average convoy consisted of 10 merchantmen, about half of them tankers carrying petroleum, oil, and lubricants (POL); the remainder were cargo ships and tugs towing barges with rice and ammunition. The Vietnamese Navy escorted the convoys to the Khmer Republic border where the Khmer Navy (MNK) took over. The MNK escort normally totaled about 30 craft organized into several groups to provide mobile firepower. The convoy transit time for the 60 miles from the border to Phnom Penh varied from 8 to 20 hours, depending on the season and the types of ships. Since the convoys usually stretched out 30 to 40 kilometers as they sailed the river to Phnom Penh, each presented numerous targets for insurgent gunners.

(S) The convoys were especially vulnerable at several points along the Mekong, where they came under attacks by fire. A favorite location of communist gunners was just above Banam at a narrow part of the river. According to a FAC who controlled TACAIR strikes along the river, the insurgents usually attacked the convoys with indirect fire from mortars and direct fire from small arms, automatic weapons, and recoilless rifles. The mortars were fired about one kilometer from the river's edge while the
Direct fire came from tunnel openings along the river bank. The insurgents tunneled to the river bank from about 500 meters back and hid in the tunnels until ready to fire. The threat to river traffic became so great after the cease-fire that the American Embassy considered the Mekong closed to convoys.

(S) The KI had gained control of significant portions of both banks of the Mekong in March 1973. The insecurity along the river corridor forced a convoy scheduled for 27 March to be postponed indefinitely. The USCGA noted on 11 April that the "FANK must reestablish and maintain control along the Mekong. It must succeed in permitting the arrival of a major convoy soon if Government control and economic stability are to be maintained in Phnom Penh." By that time, the Embassy and 7AF had already coordinated plans for air support operations to assist the FANK in reopening the Mekong.

(S) On 1 April, U.S. Army Brigadier General John R. D. Cleland, Chief of the Military Equipment Delivery Team for--and ranking U.S. soldier in--the Khmer Republic, forwarded to General Vogt a FANK General Staff request for new measures in support of Mekong convoys. General Cleland's message proposed the concept of a Special Mekong Air Sector (SMAS) with sectors located at contested areas along the river for individual FAC control. Each sector was 10 kilometers wide on both sides of the river, and would be assigned to a FAC who would direct orbiting strike aircraft into the SMAS on immediate strikes. The sectors would be redefined or terminated as the ground situation dictated. In order to provide responsive air cover
while still complying with the JCS directives requiring both Embassy and Khmer Government validation of all targets, General Vogt suggested that the Embassy declare the SMASs militarily critical and prevalidate the targets there. Further, he proposed that a FANK officer be with the ABCCC to provide rapid Khmer target validation. The Director of the Air Battle Staff aboard the ABCCC would have 7AF's authority to approve strike requests. This would be the first trial of the streamlined command and control structure which General Vogt eventually applied throughout the western Khmer Republic. It proved to be an extremely responsive TACAIR support package.

(S) The FANK, the Embassy, and 7AF first employed the SMAS concept to safeguard Mekong convoys in April. During daylight hours a FAC and two A-7s escorted the convoys. Two other A-7s were with a KC-135 tanker to replace the escort A-7s if the escorts expended or needed fuel. The A-7s were used in place of F-4s because they used less fuel and provided a longer loiter time above the convoys. For additional support, if required, F-4s, A-7s, and a gunship were on ground alert. At night an AC-130 was the escort. The entire TACAIR operation was monitored at USSAG/7AF headquarters through an innovative radio relay network. The ABCCC monitored the communications between the convoy commanders and the FACs and retransmitted them at a different frequency to a KC-135 radio relay aircraft orbiting at 31,000 feet over the western Khmer Republic. The KC-135 relayed the signals to USSAG/7AF headquarters where they were received on the hostile aircraft early warning (TEABALL) equipment. The system
allowed General Bellamy, Director of Operations, and the BLUE CHIP staff to follow ground situations as they developed and anticipate requirements for air support.

(S) In addition to the TACAIR and gunship support, preparatory bombing by B-52s and F-111s also aided the safe passage of the Mekong convoys. The night before a convoy's departure, B-52s bombed suspected enemy positions along the river. Approximately two hours prior to the convoy's arrival in high threat areas, F-111s bombed the banks of the Mekong with general purpose 500-pound bombs to keep the enemy away from the river while the convoy passed. The heavy B-52 and F-111 bombing in advance of convoy passage, combined with TACAIR support over the convoys, permitted the successful passage of the convoys. The USDAO reported that the enemy had failed to prevent passage of any of the Mekong convoys during April.

(C) At the end of May, the Khmer Air Force began providing some convoy coverage near Phnom Penh. The KAF support consisted of helicopter gunship escorts backed up by T-28s on alert at Pochentong Airfield. The KAF escorts accompanied southbound convoys from Phnom Penh down the river for 15 to 20 miles, where USAF aircraft relieved them.

(S) The need for the SMAS ceased at the end of April with development of the expanded ABCCC target validation operations.* While Mekong convoy protection remained a continuing requirement, the FANK was able to keep

*See p. 27 ff.
the Mekong supply corridor open as a result of the responsive air support available through the new procedures.

(C) Truck convoys on Routes 4 and 5 also required air support occasionally. This support was not as heavy as that which the Mekong convoys received. The Route 4 convoys carried the full spectrum of supplies, except POL, from the Khmer Republic's only deepwater port at Kompong Som to Phnom Penh. Convoys at Kompong Som and Phnom Penh, sometimes numbering over 200 trucks (many with trailers), began the 145-mile journey between the cities simultaneously. Usually they began the trip shortly after dawn and by late afternoon trucks would be arriving in both cities while the convoys still overlapped between. The primary cargo of Route 5 convoys from Battambang to Phnom Penh* was rice; they returned empty or with military supplies to Battambang. FACs accompanied the road convoys, but 7AF did not schedule strike aircraft specifically as road convoy escorts. During the day FACs requested any needed support through ABCCC as they did for any other immediate target outside FREEDOM DEEP. In addition, the two AC-130s which patrolled the Phnom Penh area nightly also provided protection for road convoys. One FAC noted that although the insurgents frequently interdicted land LOCs, they seldom bothered the convoys after the FANK reopened the roads.

(S) The USDAO believed the enemy offensive against the Government LOCs had subsided by the end of May 1973. With high levels of U.S. air

*A distance of 310 miles.
support, the FANK had kept Phnom Penh's key supply routes open through the height of the offensive. However, the effort had sometimes been frustrating for the USDAO. It was in mid-April, just after reporting the severe political and economic dependence of the Khmer Government on the arrival of a Mekong convoy, that the USDAO made the following comment regarding a listing of critical supplies in Phnom Penh: "Above figures incomplete due to Khmer New Year celebrations now in progress and resultant extreme difficulty in locating responsible Khmer officials."
CHAPTER IV

THE APPLICATION OF U.S. AIRPOWER, 1973

(S) General Vogt described the 1973 U.S. air effort in the Khmer Republic as "the most difficult campaign I've had to fight since I've been Commander of 7AF . . . ." His frame of reference included "the sustained enemy offensive in South Vietnam, the war in the North over Hanoi and, of course, the campaign in Laos." He explained that American airmen had been operating in a highly populated area within about 50 miles of Phnom Penh. The area was dense with air traffic: numerous civilian airliners of several nations flew over the battle area each day along with approximately 200 TACAIR sorties, 40 B-52 sorties, and many supporting aircraft--a total of some 300 to 350 aircraft flying in a confined air-space every 24 hours. The lack of U.S. advisers on the ground, the poor quality of some of the FANK leadership, and the fragility of the FANK forces further complicated the situation.

(U) The operational concepts which General Vogt and his USSAG/7AF staff applied in the Khmer Republic were not unfamiliar; however, their use there identified new strengths and weaknesses of individual techniques and systems.

AC-130 Beacon Strikes

(S) The immense value of the ground beacon was that it provided an easily identifiable offset aim point for all-weather ordnance delivery.
(S) AC-130 gunships had previously used both radar (Models SST-201, 119, 125, or 181) and Tactical Electro-Magnetic Ignition Generator (TEMIG) beacons in South Vietnam and Laos as early as 1969-1970. The X-band beacon is strictly a locator beacon, while the TEMIG can also transmit coded target information which is displayed on a panel in the aircraft.

(S) For several interrelated reasons, the use of beacons with the AC-130 SPECTREs was not as successful in the Khmer Republic as it had been in South Vietnam and Laos. First, the small number of English-speaking Khmer FAGs limited the effectiveness of the gunship/beacon combination for immediate air support. Ground commanders who were not FAGs did not have the authority to validate targets for gunship strikes. In such cases, the ground commander or ABCCC lost valuable time obtaining validation from Bakheng Control. A more serious problem was the lack of Khmers who were trained to use the beacons. Since all beacons were used to identify the friendly position, instructions from the ground FAG were required in order to determine bearing and distance to the target, as well as the type of target. The Khmer Republic FAGs' limited English capability greatly restricted the effectiveness of gunship close air support. Furthermore, these FAGs were normally located at major unit headquarters, which were as a rule too far removed from troops actually in contact to permit effective beacon utilization. Most TIC situations occurred 3 to 5 NM from FAG/Beacon locations; therefore, gunships could not employ their close air support tactics as designed. The original concept called for the beacon to be positioned along with the troops in contact, which enabled the gunship
to fire at offset distances of from 100 to 1,500 meters from friendly positions, depending on the type ordnance used and the proximity of friendly troops to the impact area. The 1,500 meter distance limitation is primarily due to mechanical limits of the fire control system and the gunship antenna's capability to receive a continuous beacon signal from the friendly FAG position. As distances increased in excess of 1,500 meters from the FAG beacon location, signal reception became intermittent and finally unusable for the gunships fire control system to compute offset distance. Gunships did improvise, however, when encountering a remote beacon location: by using the signal to locate the friendly position, then using multiple offset computations involving the fire control computer and inertial navigation system, the gunship was able to arrive at the FAG-directed ordnance impact point. Aircraft sensors were then locked on to prominent ground features and a firing orbit was established around the target. Registry rounds were fired so the FAG could check the impacts vis-a-vis the desired target. After making adjustments, the gunship fired for effect. This was time-consuming and required a reasonably fluent English-speaking FAG, but was very effective in utilizing the gunships' fire power. In any case, the Khmer Republic needed more English-speaking FAGs trained to work with AC-130 gunships and associated close air support beacon equipment.

(S) Here, again, the lack of U.S. advisers was detrimental and the problem was compounded by the Khmer Government's unwillingness to send FAGs out of the country for training. Not only were the FAGs needed in-country,
but also the FANK high command apparently was not familiar with gunship/beacon tactics and their potential in TIC situations. On the positive side, a slowly increasing number of firings off the TEMIGs in the summer of 1973 indicated that the FANK were becoming aware of the AC-130/TEMIG potential.

(C) The SPECTREs, which provided most of the close air support for the FANK during the hours of darkness, used the TEMIGs during nighttime Mekong convoy protection. The TEMIGs were given to the convoy commanders, who were briefly shown how to use them. However, three problems made the tactic generally unsuccessful. First, because a convoy commander's ship was a moving platform, the targeting information for any target relative to it continually changed and prevented the determination of a fixed offset aim point. Second, many of the vessels in the convoy were beyond the range of the TEMIG signal because the convoy was stretched out for several miles along the river. Third, when the enemy fired on the convoy, the convoy commander naturally went below deck for protection. The metal hull of the boat attenuated the TEMIG's signal so that the gunship had difficulty detecting the transmission. One story illustrative of problems the gunships had with the TEMIGs concerned a convoy commander who had been told not to leave the TEMIG turned on for long periods of time because of the drain on batteries. When a SPECTRE attempted to acquire the TEMIG signal one night, the most the crew could detect was a faint, intermittent signal much like static. The crew reported the TEMIG as malfunctioning but later information disclosed that the convoy commander had been below deck rapidly clicking the TEMIG on and off to conserve the batteries.
Regardless of their problems with beacons, the AC-130s maintained their well-established reputation as an effective weapon for close air support. Because the anti-aircraft artillery (AAA) and surface-to-air missile threat was relatively small in the Khmer Republic, the gunships were able to stay above ground fire and still be low enough to provide effective fire support for the FANK. There were some reports of SA-7 firings and small caliber AAA, but generally the AAA and missile threats were countered. Adding to the effectiveness of the SPECTREs in the Khmer Republic was the installation of trainable 40mm and 105mm guns.

The 16th Special Operations Squadron at Ubon RTAFB received new gun mounts in May 1973 and within 40 days outfitted all of the H model AC-130s with the trainable 40mm guns in addition to movable 105mm weapons. Reports indicated that the new capability significantly improved the AC-130s' performance in the close air support role by allowing the sensor operators to rapidly acquire and fire ordnance at fixed or fleeting targets. A major advantage was being able to move the ordnance impacts along a treeline or revetment by simply moving the guns and not having to change the aircraft firing orbit.

F-111 Beacon Bombing

As in Laos, the use in the Khmer Republic of F-111s with beacons was a very successful operation. The F-111/beacon combination was a product of the last months of U.S. air operations in Laos when 7AF needed an all-weather, day and night bombing capability responsive to immediate air strike requests from ground commanders. Before its utilization with the
AN/PPN-18 transponder beacon, the F-111 bombed only preplanned targets using a concept of operations similar to B-52 ARC LIGHT missions. Because its medium altitude radar bombing mission required the advanced preparation of radar maps followed by crew briefings, a process which consumed several hours, the F-111 could not be diverted while airborne to support rapidly changing ground situations. Upon its introduction into F-111 operations, however, the beacon provided an easily identifiable and accurate offset aim point for the F-111. The only data the F-111 needed to divert to an immediate target were the bearing to the target from the beacon, the distance from the beacon to the target, and the target elevation. With this information set into its on-board computer, the F-111 was prepared to strike the new target. According to a 7/13AF report on the F-111/beacon combination used in Laos, it "proved to be an effective, reliable and accurate method for flexible employment of the unique all-weather attack capabilities of the F-111 aircraft in support of ground forces." Thus, 7AF quickly applied the technique in the Khmer Republic when U.S. air operations escalated there.

(5) The P50AO began to implant F-111 beacons in the Khmer Republic in March 1973. By mid-June 1973 there were 10 beacons in operation at population centers and critical points on LOCs. (See Figure 4.) The F-111/beacon combination successfully provided direct air support because each beacon was located near a FAG, and the F-111's effective range from the beacon was 16 miles. Using their radar, the F-111s flew through the Southwest Monsoon thunderstorms and, with the beacon targeting information
provided by the FAG through ABCCC, delivered their ordnance accurately. At Takeo, for example, the F-111s beacon-bombed from 15,000 feet through rainstorms and overcast, on occasion dropping the bombs as close as 200 meters from friendly troops. They struck in this same manner at Neak Luong when the KI attempted to interdict the Mekong there. The KI massed forces around the city, waited for inclement weather, and attacked when the weather moved in. Severe thunderstorms in the afternoon forced the FACs out of the area. Even the gunships were ineffective in the bad weather; but the F-111s pounded the enemy positions all that afternoon, evening, and the next day, bombing as close as 400 meters to friendly troops. Under the persistent bombing the KI quit the attack, leaving Neak Luong in Government hands.

**F-111 Pathfinders**

(S) The F-111/beacon combination with the F-111 in the pathfinder role added still another dimension of flexibility to U.S. TACAIR support. Although General Vogt described the A-7s and F-4s as "the real workhorses" in the Khmer Republic, those aircraft by themselves were severely hampered by inclement weather. As pathfinders, the F-111s led the A-7s and F-4s through bad weather to the targets and used the beacons to fix precise ordnance release points.

**F-4 Pathfinders for B-52s**

(S) Lack of a ground radar site to direct bombing strikes against enemy onslaughts in the southern half of the Khmer Republic was the basis
for developing the innovative tactic of F-4 PAVE PHANTOMs acting as pathfinders* for B-52s. (The B-52's radar bombing system required precise aiming points which were a rarity in the flat, water-laden terrain of the southern Khmer Republic.) After the Vietnamese cease-fire and deactivation of the COMBAT SKYSPOT radar at Bien Hoa Air Base, South Vietnam, the remaining SKYSPOT coverage from sites in Thailand extended only to targets north of Phnom Penh and then only on certain axes of attack. Since political reasons precluded the relocation of a COMBAT SKYSPOT site to the Khmer Republic, other tactics had to be developed. One solution to the problem was found in late March 1973 when PAVE PHANTOMs, fitted with three external tanks to optimize their refueling cycle, were used to lead B-52s over the targets.

(S) Although simple in concept, the new tactic presented some problems.** First, the F-4 pathfinders could not approach the Khmer Republic from the southwest over water because crossing the coastline disrupted their "fix" on the LORAN coordinates. Second, after the cell of three B-52s joined with the F-4 at an IP*** about 60 miles from the target, all aircraft had to maintain the formation on a fairly straight course to the target. If thunderstorms were over the target or located so as to

*In the pathfinder role, these LORAN-equipped F-4s also led A-7s and other F-4s to the targets.

**Normal LORAN charts used for navigation were not sufficiently accurate for bombing and had to be corrected through a laborious process known as SENTINEL LOCK. The corrections, requiring extensive photography to compare actual terrain features with LORAN plottings, were already in progress but 7AF had to accelerate the effort.

***IP = Initial Point.
require a deviation from course, the B-52s had to abort their primary target run and proceed to an alternate target. Finally, the electrical effects of thunderstorms on the LORAN systems also caused the loss of some missions against primary targets. General Vogt said that B-52 sorties were lost against primary targets almost every day because of weather but, still, over 50 percent of the B-52 strikes in the Khmer Republic between March and late July had been led by F-4s. He added that when the strikes were carried through, the accuracy was about as good as with COMBAT SKYPOT.

**B-52 Pathfinder**

(S) in addition to the PAVE PHANTOMs, there was a LORAN-equipped B-52, called PAVE BUFF, that was used as a Pathfinder in Southeast Asia for ARC LIGHT strikes. The PAVE BUFF operated* in essentially the same manner as the PAVE PHANTOMs and had the same problems.

**B-52 Beacon Bombing**

(C) The employment of ground radar beacons (Wet Snow) for B-52s also helped compensate for the loss of the COMBAT SKYPOT capability in Vietnam. The first B-52 beacons were collocated with F-111 beacons at the end of March 1973, and the bombers began testing the new system shortly thereafter. The first actual B-52/beacon bombing missions occurred in mid-June. By the end of July there were eight active B-52 beacons collocated with F-111

* (S) PAVE BUFF was launched from U-Tapao with a cell of three B-52s, and after effecting a release for this cell, it would depart for an orbit area. Here it would rendezvous with another cell from either U-Tapao or Andersen AFB, Guam, and lead them to their target. Normally, two or three cells were led in this manner each day.
of the Mekong River from Phnom Penh to Neak Luong along Highway 1. The strategy was to secure the west bank so that the narrows of the river, which were controlled on both banks by the enemy, would be cleared out on one bank, thereby denying the fire from that bank to the enemy and also putting defenders in a position to bring down supporting fire from the west bank against the east bank positions as convoys passed. This would offset the loss of air and would provide firepower in support of the convoy. This was considered to be a critical part of the plan because, if it didn't work out, Phnom Penh would eventually be strangled—the convoys would cease their passage because the boat captains would refuse to go down the river, and Phnom Penh would fall in time. The defensive move had to be accomplished prior to the cessation of U.S. bombing because we believed that nothing could be accomplished after the bombing halt.

(5) The plan was taken back to Phnom Penh by General Hou Hang Sin, reworked with more detail added, and presented to the high command. On the 23d of July, General Fernandez, Commander-in-Chief of the Khmer armed forces, came here for detailed discussions on the plan. Upon his return he discussed it with President Lon Nol. On 4 August, General Hou Hang Sin came back with a large element of FANK staff including J-2 [Director of Intelligence] and his planners. We then put the final touches on the defense plan for Phnom Penh. On 6 August, I traveled to Phnom Penh and met with President Lon Nol and the political high council. The plan was presented to the political high council at that time by the FANK General Staff. We had complete agreement with everybody at that meeting to proceed with the implementation of the plan.
In a 19 July report to Admiral Gayler and Admiral Moorer, General Cleland gave an outline of the military situation and the prospects. He thought the situation looked grim. He wound up the report by stating, "I believe that as the situation now stands, neither the FANK nor the government will last long after the 15 August bombing halt if the enemy offensive continues."

We had cause to be pessimistic about the situation because, as I mentioned earlier, the enemy forces had penetrated on the southern front to within seven clicks of the airfield. They had penetrated on the northwest front of the 7th Division lines and were approaching Pochentong Airfield with small groups of troops. They had begun operations up the Bassac River getting closer to Takhmau, a city southeast of Phnom Penh, and were preparing to bring fire to bear there. They had interdicted Route 1 very close to Phnom Penh along the banks of the Mekong. They had seized control of a stretch of highway at one point within three clicks of the city itself. At that point in time I brought our U.S. airpower to bear on the immediate situation.

(S) The key, of course, to clearing up the situation in other areas, particularly the Mekong and Bassac areas, was to stabilize conditions on the main front. The enemy had planned all along to make his main assault up Highway 3 across the Prek Thnot River, then drive directly into Pochentong, and on into the city limits. I mentioned the salient where he had succeeded in driving into the friendly defenses. So, I concentrated, for a period of some three weeks, the main weight of U.S. air efforts on those enemy positions.
This meant targeting B-52s and F-111s as close as we possibly could to the forward FANK troops to inflict enemy casualties. We used 20 to 30 sorties of F-111s and as many as 30 sorties of B-52s across that front line every day. It meant that we had to take risks. With all that firepower there was always the possibility of a short round which could cause catastrophic casualties in friendly positions.* We had no alternative but to put that firepower in there; otherwise, that front would have collapsed, and the enemy's concentrated drive on three fronts--southeast up the Bassac/Route 1 area, south up the Route 3 salient, and from the northwest down Highway 5--would succeed. There was no other alternative but to break the back of the main enemy forces on the south by using Air Force firepower. I accepted those risks and brought the airplanes in close proximity to friendly forces.

(S) The enemy forces now announced that they were undertaking the final assault against Phnom Penh. They stated that they would be in Phnom Penh in a short period of time. They stockpiled ammo, weapons, and equipment in areas of the city of Phnom Penh and infiltrated troops with the idea of causing a major uprising in the city when the front began to collapse, so that the city would fall--a two-pronged effort, one from within the city, and the other, of course, from the various thrusts toward the city. This was an all-out drive to seize the city of Phnom Penh. The

*Two short round incidents did occur during the closing weeks of the campaign. One was a B-52 strike which press reports said killed over 100 civilians and friendly soldiers in Neak Luong. Another was an F-111 which hit friendly positions on an island in the Mekong River near Neak Luong.157
The enemy stated publicly and in the official documents that we later captured that they were determined to take the city of Phnom Penh while the U.S. Air Force was still bombing to "inflict a major political defeat on President Nixon." That was the propaganda and morale factor they were hoping to take advantage of. If we could not save Phnom Penh despite all this U.S. air, then how could we help to save any other major area of SEA in the future? What good would the U.S. air guarantee be in a future involvement if we couldn't turn off this enemy offensive in Phnom Penh?

I think they felt that this would have a tremendous morale effect throughout SEA, and perhaps change the whole course of the war. Thus, it became doubly important to us that this attack be turned off, that the enemy offensive be destroyed.

(S) The targeting that was done at this time was extremely difficult. The enemy understood that the closer they got to friendly forces, the less vulnerable they would be to U.S. air because of the difficulty of putting in heavy firepower close to friendly forces. They issued orders to their troops to move in close to friendly defenses and press hard all the time.

It was this problem we confronted. In addition, the area we were now working in was heavily populated with very many villages, some still occupied, which we had to carefully avoid in our bombing. It was a cardinal rule, of course, in our Rules of Engagement that we could not attack villages even though the enemy was known to be in there, because of the friendly casualties that would be inflicted—civilian casualties. We had to work around many, many villages and populated areas. This was a problem.
we'd never had before in my experience over here. Previously, we'd been 
bombing in relatively unoccupied areas in defense of specific objectives. 
Our defense of cities in South Vietnam, like An Loc, was done in the rela-
tively sparse areas surrounding the cities. There were no built-up areas, 
no large villages, especially outside the population centers. This was 
different; here we had to work around them. This meant that we had to 
know the status of each of the villages, whether or not they were still 
occupied. So, we adopted a technique using some new IR [infrared] equip-
ment that had just been delivered here on RF-4 airplanes. It permitted us 
to tell whether or not a city was dead by the heat emissions from the city. 
We began extensive mapping programs of all the villages in the area to 
determine which were still occupied and which were no longer occupied, 
using all sources of information, but relying very heavily on this new, 
very effective IR equipment in the airplane. Each day we plotted on a 
large chart the status of all those villages so that we could properly 
plan our bombing.

(S) At the end of our bombing campaign, beginning about six days 
before the actual termination of the bombing, the enemy began to fall 
back. He had suffered such heavy casualties in all areas, particularly 
in the southern front area, that he could no longer sustain the offens-
ive. It began with one unit commander on the southern front reporting 
that he was compelled to fall back from the line. As he began to withdraw, 
the elements on his flank reported that their position was now untenable 
in view of the one withdrawal, and they would have to fall back also. So
about five or six days before the bombing halt, the whole enemy offensive collapsed on all fronts around the city of Phnom Penh, and they began a withdrawal. We had reports now, good, valid intelligence sources, indicating that the enemy literally lost thousands to air activity along that southern front. One commander reported, for example, the loss of over a thousand killed or wounded in his sector alone. Just the other day we received a report from another commander of a battalion-sized element which lost hundreds, and that did not include the sister battalions around him which also suffered heavy losses. So the enemy offensive to seize Phnom Penh was turned off, and it was turned off by U.S. airpower! Now, to read the U.S. newspapers, you get the impression that air was ineffective, and that the whole bombing of Cambodia had been worthless, that nothing had been achieved by it. The simple fact of the matter is that Phnom Penh was saved and the enemy was dealt a severe blow. He has not recovered from that blow yet.

(S) Many people, particularly the press, felt that the enemy would surge into Phnom Penh and seize the city once the bombing stopped. The enemy is attempting to get another offensive going, but he is hurting badly and it's going to take him some time to really get moving. In the meantime, following the collapse of the southern front, the friendlies were able to pull the 1st Division in its entirety from the Prek Tohnot defense lines and move them over to the Route 1 area. After we softened that route all the way down to Neak Luong with U.S. air, they launched an assault. About a week before the end of the bombing, they seized the entire length of the highway.
from Phnom Penh to Neak Luong and drove the enemy out from the west bank of the river. Now this move, which was a brilliant execution of a difficult plan by the 1st Division commander, went virtually unnoticed in the press. The press had been reporting just two days before that the enemy was within three clicks of the city of Phnom Penh along Route 1. They now had to concede that the road was open all the way to Neak Luong. But it was not billed as any great victory on the part of the Cambodians, although it represented a tremendous achievement on their part. So, we wound up four or five days before the bombing ended with the enemy offensive against Phnom Penh totally turned off, the enemy withdrawing on all fronts, and the friendly forces extending their line well south of the Prek Thnot River. The enemy salient was completely eliminated; the line was now generally along the Prek Thnot but in some places well south of the river. The friendly forces also control the entire west bank [of the Mekong] all the way to Neak Luong. Convoys that have gone up and down the river since that time have received virtually no fire at all.

(S) At the same time, extensive air was used to the west of Phnom Penh. The small enemy groups (battalions and smaller size elements that were once within two clicks of the airfield at Pochentong) were badly mauled by TACAIR controlled by FACs, and they finally had to withdraw. The [FANK] 7th Division, to the north, reestablished their positions along Highway 5, cleaned out the enemy behind their lines, and vastly improved the close-in situation around Phnom Penh.
Now, another major element of the overall plan called for withdrawing FANK forces from areas that could not be defended after the bombing halt. These areas were Romeas, Skoun, Pa Kham, and other isolated outposts. It was envisioned that these isolated elements would all be withdrawn either into Kompong Cham or Kompong Chhnang. [See Figure 5.] Some elements in the south, such as at Takeo, would withdraw into Kompong Speu, and the forces released thereby could be used to better defend the more defensible points. This would also permit elements from the outlying provinces to be brought in to reconstitute a strategic defense of Phnom Penh. Now, that's one part of the plan that was not properly executed. The reason was politics. When General Fernandez requested authority to withdraw from Skoun, he was informed that In Tam, the Prime Minister, had a political following in Skoun; he was not going to pull out of there and lose face with his followers in that area. Even though he could not defend Skoun militarily, General Fernandez was compelled to stay in there until the city was actually overrun. At the end of July, Santuk was overrun, Pa Kham shortly thereafter, then Skoun, and all with substantial losses of equipment and guns (a total of eight 105mm howitzers), and many, many people killed and wounded. It was a debacle! It was unnecessary! It had been predicted in the plan we had drawn up; but since the Khmer Government didn't execute the plan properly because of political restrictions, a heavy price was paid.

(U) Question: Do you think the enemy forces will ever be strong enough again to mount a serious threat against Phnom Penh?
General Vogt: Yes, I think so. We realized that some substitute had to be found for the U.S. firepower that would be withdrawn soon. The Khmer Air Force could never hope to make up this deficit. It is a small outfit with a few T-28s, about 40 of them. Ultimately, they will have about 52, with about one-half of them operational at any one time. They carry very small bomb loads. The KAF has some AU-24s which are light planes with a 20mm gun, but those aircraft are only moderately effective. It occurred to us to make more use of heavy artillery, and as part of the defense plan, we devised a central fire support system tying together the artillery of the friendlies. This fire control system would provide artillery support on any sector of the front surrounding Phnom Penh on a mass-firepower basis. I felt that if an attack were mounted by the enemy after the bombing stopped and there was no firepower support for the front line troops, they would have fled in terror and the whole thing would have collapsed. I worked very hard on getting the central fire control system set up in Phnom Penh [and] getting additional 155mm guns brought in. I brought in four additional ones. That, with the eight already there, gave them two 6-gun batteries. One was located south of Phnom Penh, the other was north. These guns, with their extensive range, would provide effective fire support for all the units deployed around the defense perimeter.

I went to Phnom Penh on the 6th of August to see how the system was working, and I was pleasantly surprised to see that the fire support center had been set up in Phnom Penh as we had recommended, with land...
lines and radio communications to all the batteries, and the FANK were now capable of massing fire in front of their forces around the perimeter. There were some fifty-five 105mm guns tied into this net along with the twelve 155s I mentioned previously. When I got into the field to look at the 155 battery in the south, I asked to see a demonstration of their capability to lay down fire. That day the battery was all set to fire but could not because U.S. air was operating in the target area. So, we got on the phone and withdrew our U.S. air for about 10 minutes, allowing the FANK to demonstrate their capability. I had asked them to target some bunkers in front of the 3d Division lines along the Prek Thnot. They fired five rounds from each of three guns for a total of 15 rounds in a good, professional way. I found out later from the Defense Attache in Phnom Penh that those shells had destroyed some enemy bunkers. The FANK forces had advanced to those bunkers and found the enemy had been killed inside. The FANK were now elated with this new-found capability.

(S) We had been looking for means to substitute artillery firepower for air firepower. We controlled it in a manner in which it had never been controlled before. With centralized control we could mass it and make it immediately responsive in support of the local commander on any front. Thus, the plan was implemented. We had had to get a good man to set the system up. The most competent FANK general officer down there to do this was working for President Lon Nol as an adviser. We had to go to President Lon Nol to acquire this man. The man was trained by the French in artillery and was a very good artilleryman. Lon Nol didn't
want to spare him. By pressuring Lon Nol, I acquired this man and he did
a tremendous job in setting up the central fire support center. It was
located next to the COC in General Staff headquarters just downstairs from
the KDASC. The fire support center coordinated all the activities of the
Air Force and the artillery. If a commander comes under attack, he can
call into the center to get heavy artillery support in a matter of a couple
of minutes. What remains to be seen, of course, is whether or not they can
hold this all together during any further concentrated attacks by the enemy.

(S) As I mentioned earlier, at this point in time the enemy had been
driven from the Phnom Penh area, shifted his weight to Kompong Cham, and had
begun a major offensive against that provincial capital of about 75,000
people. We have worked with the FANK in coming up with a defense plan for
Kompong Cham. We've had visits here for the last several days with the FANK
high command. We've gone over the plan in detail and put the finishing touches
on it. The plan is now being implemented by the FANK. The concepts are
basically the same kinds of things we strove for in the Phnom Penh area, with
centralized artillery support tying in all the defensive positions around
the perimeter. Other reinforcements have already been planned. The outcome
of the Kompong Cham battle may well indicate what will happen ultimately in
Phnom Penh. It remains to be seen whether the defense will stand the test
of time. But one thing is apparent—the friendlies have new heart now.
At first they were very much discouraged at the prospects of losing U.S.
air support. They now know they have a plan, a good one. If its imple-
mentation is successful, it will stabilize the defensive lines. The FANK
will seize strategic areas along the Mekong, and generally beat the enemy back from all the forward positions so that the enemy forces no longer will threaten the security of Phnom Penh. Only time will tell, now, whether in the long term the FANK can keep it all together. They are aroused, they know what they have to do, and they are working on it. The main point I want to get across, though, is that the determined enemy push against Phnom Penh, designed to cause the fall of the city while U.S. air was still there, was utterly defeated. It may have been the biggest strategic mistake the enemy made during the war. There is no doubt in my mind that had the enemy held off on this big push until after the U.S. bombing halted, the offensive would have succeeded. There was no way those Cambodians could have prevented the fall of Phnom Penh. The enemy felt the psychological impact of taking the city despite U.S. air support was worth the gamble. He gambled and he paid a heavy price for it—very, very heavy casualties and the loss of momentum. Whether the enemy forces can put it all together again after the losses they have sustained, and successfully assault the city of Phnom Penh, is another question. I do know one thing—their prospects have gone down dramatically! I don't know whether this lesson will be lost on the American public because of the unprofessional and very biased reporting of the press recently, but those are the facts as they happened. I saw these things occurring on a daily basis and had total access to the information as the events unfolded.

(S) It is interesting to note that the enemy risked lives and jeopardized his forces for a psychological victory. The military aspects, as far as I can
see, did not justify his attack before the bombing halt. As I mentioned earlier, he could have done it had he waited until the bombing ceased. Militarily, that was the soundest thing to do; but he sacrificed the lives of his own troops to achieve a psychological objective; a massive strategic error on the enemy's part.

(U) Question: Do you foresee the reapplication of U.S. airpower in SIA?

(S) General Vogt: Well, it's quite apparent that the Administration envisions maintaining airpower here as a deterrent, as an effective weapon for countering any possible major provocation by enemy forces. It is conceivable that if the North Vietnamese mounted a major offensive, the American Congress would authorize renewed bombing. So I don't rule it out. It would take something like a major invasion, though, before the Congress would authorize bombing again. This would have to be a major provocation, a flagrant violation of the cease-fire agreement, not merely a threat to Kompong Cham or Phnom Penh.
**APPENDIX**

**KHMER REPUBLIC SORTIE SUMMARY**

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<td>TOTAL 8115</td>
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*Includes gunship but not B-52 sorties.*

**NOTE:** Numbers in parentheses obtained from USSAG/DOY; others from SEAGOPS.

**SOURCES:** SEAGOPS, Dec 72; SEAGOPS, Jun 73; USSAG/DOY.
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8. CHECO rpt, Khmer Air Operations, p. 4; rprt (S), Commando Hunt VII, Hq 7AF, Jun 72, pp. 12, 13.

9. Agreement on Ending the War and Restoring Peace in Vietnam (U), Jan 73, p. 22.

10. Msg (S), Ambassador Swank, Phnom Penh, to General Weyand, COMUSMACV, 271146Z Jan 73; SEAOPS, Feb 73, p. 3-1.

11. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 111200Z Apr 73.

12. Ibid; msg (S), USDAO, Phnom Penh, to JCS/DIA, 121030Z May 73; msg (S), USDAO, Phnom Penh, to JCS/DIA, 090930Z Jun 73; SEAOPS, Dec 72, p. 3-2.

13. Msg (S), CHMEDTC, Phnom Penh, to Dir of Air Ops, MACV, 300745Z Jan 73; SEAOPS, Feb 73, p. 1-1; msg (S), 7AF/BLUE CHIP to 388TFW, et al, 030805Z Mar 73.

14. Msg (TS), CJCS to CINCPAC, 081525Z Mar 73.

15. Command briefing (S), Hq USSAG/7AF, 10 Apr 73.
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17. Working papers (S), Combat Sorties in the Khmer Republic by Week from Mid-August 1972, USSAG/DOTD, 12 Jun 73.

18. SEAOPS, Apr 73, p. 3-A-2.

19. Briefing (S), Current Air Operations Briefing for Prime Minister of Thailand, USSAG/DOTB, May 73; intvw (S), Major Paul W. Elder, CHECO Historian, with Gen John W. Vogt, Cmdr USSAG/7AF, NKP RTAFB, 20 Jul 73.

20. Intvw (S), Capt Paul W. Elder, CHECO Historian, with Lt Col Richard B. Morrin, Chief, Target Management Office, USSAG/DOCM, NKP RTAFB, 2 May 73.

21. Intvw (S), Maj William W. Lofgren, Jr., CHECO Historian, with Gen John W. Vogt, Cmdr 7AF/USSAG, NKP RTAFB, 28 May 73; Public Law 91-652, Sec VII (a), as amended by Public Law 92-226.

22. TIME, 28 May 73, p. 4.

23. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 090830Z Jun 73.


26. SEAOPS, Apr 73, p. 3-A-2.

27. SEAOPS, Dec 71, p. 3-1; SEAOPS, Mar 72, pp. 3-1-3-3.

28. SEAOPS, Jan-Dec 72.

29. SEAOPS, Jun 72, p. 3.; SEAOPS, May 72, p. 2.

30. SEAOPS, Nov 72, p. 3-2; SEAOPS, Dec 72, p. 3-A-2.

31. SEAOPS, Jun 72, p. 3-3; SEAOPS, Feb 72, pp. 3-2, 3-6; SEAOPS, Mar 72, p. 3-2.

32. SEAOPS, May 72, pp. 3-4, 3-5, 3-A-1.

33. SEAOPS, Mar 72, p. 3-6.

34. SEAOPS, Jun 72, p. 3-1.

35. SEAOPS, Jul 72, p. 3-1.
36. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 121030Z May 73.


38. SEAOPS, Dec 72, p. 3-2.

39. SEAOPS, Jun 72, p. 3-2; SEAOPS, Jul 72, pp. 3-1, 3-2.

40. SEAOPS, Aug 72, pp. 3-1, 3-4; SEAOPS, Nov 72, p. 3-5.

41. Hist (S), 374th TAW, Jul-Sep 72, p. 34.

42. Working papers (C), Log of Aerial Resupply Missions in SEA, USSAG/DOOS, undtd.

43. Ltr (C), CLC/JGS to RVNAF Liaison Team in Phnom Penh, 25 Oct 72. [Ltr is from South Vietnamese Joint General Staff directing their liaison team in Phnom Penh to recover parachutes and rigging materials from the FANK.] (C)

44. USSAG/DOOS working papers; intvw (U), Maj Paul W. Elder, ChECO Historian, with Maj Daniel F. Ruskiwicz, USSAG/DOOS, 14 Jun 73.

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46. Msg (S), Ambassador Swank, Phnom Penh, to Gen Weyand, COMUSMACV, and Gen Vogt, DEPCOMUSMACV, Saigon, 271146Z Jan 73.

47. Msg (S), Col Burnell, DATT, Phnom Penh, to BGen Bellamy, MACDO, 300928Z Jan 73.

48. 7AF Operation Order 71-17 (S), "Rules of Engagement Southeast Asia," 6 Dec 71, Change 4, 19 Jun 72, Sec III, p. 16.

49. Msg (S), DATT, Phnom Penh, to MACDO, Saigon, 300928Z Jan 73.

50. Msg (S), 7AF to AIG 7939, 020745Z Feb 73.


52. Msg (S), DATT, Phnom Penh, to MACDO, Saigon, 300928Z Jan 73.

53. Hist (S), USSAG/DOCM, 15 Feb-15 Apr 73.

54. USSAG/DOID working papers; msg (S), BGen Cleland, CHMEDTC, Phnom Penh, to BGen Bellamy, MACDO-2, Saigon, 021141Z Feb 73.
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56. USSAG/DOTD working papers; USSAG/DOTB briefing.

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60. USSAG/DOTD working papers.

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62. Msg (TS), SECSTATE to CINCPAC, 171504Z Apr 73.

63. Morrin intvw.

64. Hist (S), USSAG/DOCM, 15 Apr-15 Jun 73.

65. USSAG/DOCM History, 15 Apr-15 Jun 73.

66. Msg (S). Col Burnell, DATT, Phnom Penh, to USSAG, 210830Z Feb 73.

67. Ltr (U), Khmer DASC Survey Team to USSAG/7AF (DO), subj: Recommendation for the Establishment of a Direct Air Support Center in the Khmer Republic, 24 Feb 73.

68. CHECO rprt, Khmer Air Operations, p. 38.

69. KDASC Survey Team ltr.

70. Msg (S), Col Burnell, DATT, Phnom Penh, to USSAG, 210830Z Feb 73.

71. SEAOPS, Feb 73, p. 3-4; SEAOPS, Mar 73, p. 3-5.

72. USSAG/DOCM History, 15 Apr-15 Jun 73.

73. CHECO rprt, Khmer Air Operations, pp. 18, 19; talking papers (S), subj: Khmer Target Validation Procedures, USSAG/DOCM, undtd.

74. Msg (S), BGen Bellamy, MACDO-2, Saigon, to BGen Cleland, CHMEDTC, Phnom Penh, 020356Z Feb 73.

(THIS PAGE IS UNCLASSIFIED)
75. Intvw (S), Maj Paul W. Elder, CHECO Historian, with Capt Paul R. Arrnio, Target Management Office, USSAG/DOCM, 19 Jul 73.
76. USSAG/DOCM History, 15 Feb-15 Apr 73.
77. USSAG/DOC History, 15 Apr-15 Jun 73.
78. Vogt intvw, 20 Jul 73.
79. Msg (S), 7AF to USDAO, Phnom Penh, et al, 291145Z Apr 73.
80. Vogt intvw, 28 May 73.
81. SEAOPS, Apr 73, pp. 3-4, 3-5.
82. USSAG/DOC History, 15 Apr-15 Jun 73.
83. Arrnio intvw.
84. Vogt intvw, 20 Jul 73.
85. 23d TASS tactics briefing (C), conducted by Capt Glenn J. Wright, NAIL FAC, NKP RTAFB, 19 Jul 73.
86. Ibid.
88. Ibid.
89. 23d TASS tactics briefing.
90. Vogt intvw, 20 Jul 73.
91. Ltr (C), USSAG/DOSO to USSAG/DO, subj: FACT SHEET on Mekong Convoy Operations, 23 May 73.
92. Working papers (U), Convoy ABF Last 12 Convos, 23 Apr-9 Jun 73, USSAG/DOO, 13 Jun 73.
93. 23d TASS tactics briefing.
94. Msg (S), Col Opfer, AIRA, Phnom Penh, to BGen Bellamy, USSAG/DO, 020807Z Apr 73.
95. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 111200Z Apr 73.
96. Msg (S), Col Opfer, AIRA, Phnom Penh, to BGen Bellamy, USSAG/DO, 020807Z Apr 73.

UNCLASSIFIED
97. Msg (TS), AFSSO, NKP, to SSO, Phnom Penh, 030505Z Apr 73. [The information in this msg was subsequently released as SECRET in the USSAG/DOCM Historical Summary for 15 Feb-15 Apr 73.]

98. USSAG/DOCM History, 15 Feb-15 Apr 73.


100. Intvw (S), Maj Paul W. Elder, CHECO Historian, with Maj Richard Scuderi, USSAG/DOCA, NKP RTAFB, 13 Jun 73.

101. Vogt intvw, 20 Jul 73; intvw (S), Maj Paul W. Elder, CHECO Historian, with Maj O. V. Monto, USSAG/DOOO, NKP RTAFB, 12 Jun 73.

102. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 121030Z May 73.

103. Msg (C), USDAO, Phnom Penh, to COMUSSAG, 291124Z May 73; msg (C), SSO, Phnom Penh, to AFSSO, NKP, 081041Z Jun 73.

104. Aarnio intvw; Vogt intvw, 20 Jul 73.

105. 23d TASS tactics briefing; Monto intvw.

106. Msg (S), USDAO, Phnom Penh, to AIG 7892, 150201Z Apr 73.


108. Intvw (S), Maj Paul W. Elder, CHECO Historian, with Lt Col Jack H. Dale, Air Operations Staff Officer (Beacon Monitor), USSAG/DOXW, NKP RTAFB, 12 Jun 73.

109. Comments (S), Lt Col J. H. Kyle, Hq PACAF/XOOFs, 12 Mar 74.

110. Intvw (S), Maj Paul W. Elder, CHECO Historian, with Lt Col Richard G. Panuska, Gunship Monitor, USSAG/DOXW, NKP RTAFB, 13 Jun 73; Kyle comments.

111. Panuska intvw; intvw (C), Maj Paul W. Elder, CHECO Historian, with Lt Graham P. Dunlop, Gunship Monitor, USSAG/DOXW, 20 Jul 73.

112. Talking paper (C), subj: Employment of X-Band Beacons for Offset Shooting with AC-130 Gunships; TEMIG-1 Employment, USSAG/DOXW, 26 May 73; Kyle comments.

113. Panuska intvw; Dunlop intvw.

UNCLASSIFIED
114. Panuska intvw; Monto intvw.

115. Vogt intvw, 20 Jul 73; intvw (U), Maj Paul W. Elder, CHECO Historian, with Capt Daniel R. Vanderhorst, NAIL FAC, NKP RTAFB, 19 Jul 73.

116. Panuska intvw; Dunlop intvw; Kyle comments.

117. Rprt (S), F-111/AN/PPN-18 Beacon Employment in Southeast Asia, Hq 7/13AF (DO), 19 Mar 73.

118. Vogt intvw, 28 May 73; Vogt intvw, 20 Jul 73; USSAG/DOTB briefing; Ltr (S), USSAG (DOT) to 7AF/OL-AA (Project CHECO), subj: CHECO Report: Khmer Air Operations, 1 Dec 71-15 Aug 73, 6 Dec 73, para j.


120. Ibid.

121. Ibid., intvw (S), Maj Paul W. Elder, CHECO Historian, with Maj Ralph B. Miller, Operations Officer, USSAG/B-52 Operations, NKP RTAFB, 20 Jul 73.


123. Ibid., Miller intvw.

124. Ltr (C), 13AF ADVON/DOO to 13AF ADVON/DO, subj: Current Operations Historical Report-1st Quarter FY 3/73, 30 Apr 73, p. 2; Comments (S), Maj L. H. Hamit, Hq PACAF/XOOFF, 22 Mar 74.

125. Dale intvw; Vogt intvw, 20 Jul 73.

126. SEAOPS, May 73, p. 3-A-2.

127. Monto intvw.


129. SEAOPS, Apr 73, p. 3-4; SEAOPS, May 73, p. 3-4.

130. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 111200Z Apr 73.


132. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 111200Z Apr 73.

133. Msg (S), USDAO, Phnom Penh, to AIG 7892, 141150Z May 73.
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136. Vanderhorst intvw.

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138. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 121030Z May 73.

139. Msg (C), CHMEDTC, Phnom Penh, to CINCPAC, 111345Z Apr 73. [CMR: S-841]

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143. Msg (S), COMUSAG/7AF to CINCPAC, et al, 171130Z Apr 73.

144. Vogt intvw, 20 Jul 73.

145. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 121030Z May 73.

146. USSAG/DOTB briefing; msg (S), USDAO, Phnom Penh, to JCS/DIA, 090830Z Jun 73.

147. Msg (S), USDAO, Phnom Penh, to JCS/DIA, 090830Z Jun 73.


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152. Intelligence briefing (S), 13AF ADVON Commander's staff meeting, 4 Aug 73.


154. Msg (S), USSAG/7AF to 8TFW, et al, 120430Z Aug 73.
155. Msg (S), AMEMBASSY, Phnom Penh, to SECSTATE, 060935Z Aug 73.

156. Intvw (S), Lt Col Billy G. Cobble, Dir, Project CHECO, and Capt Thomas D. DesBrisay, CHECO Historian, with General John W. Vogt, Cmdr, 7AF/USSAG, NKP RTAFB, 20 Aug 73.

## GLOSSARY

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<th>Acronym</th>
<th>Description</th>
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<tr>
<td>AAA</td>
<td>Anti-aircraft Artillery</td>
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<tr>
<td>AB</td>
<td>Air Base</td>
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<tr>
<td>ABCCC</td>
<td>Airborne Battlefield Command and Control Center</td>
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<tr>
<td>ARC LIGHT</td>
<td>B-52 operations in SEA</td>
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<tr>
<td>ARVN</td>
<td>Army of the Republic of Vietnam</td>
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<tr>
<td>BLUE CHIP</td>
<td>7AF command and control center</td>
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<tr>
<td>CINCPAC</td>
<td>Commander-in-Chief, Pacific Command</td>
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<tr>
<td>COC</td>
<td>Combat Operations Center</td>
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<tr>
<td>COMUSMACV</td>
<td>Commander, United States Military Assistance Command, Vietnam</td>
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<tr>
<td>COMUSSAG</td>
<td>Commander, United States Support Activities Group</td>
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<tr>
<td>DASC</td>
<td>Direct Air Support Center</td>
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<tr>
<td>FAC</td>
<td>Forward Air Controller</td>
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<td>Forward Air Guide</td>
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<td>Forces Armees National Khmer</td>
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<td>FREEDOM DEAL</td>
<td>Interdiction area in the Khmer Republic</td>
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<tr>
<td>RTAFB</td>
<td>Royal Thai Air Force Base</td>
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<td>SA-7 Strella</td>
<td>Soviet-built hand-held surface-to-air missile</td>
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<td>Supply Cambodia Out of Thailand</td>
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<tr>
<td>SMAS</td>
<td>Special Mekong Air Sector</td>
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<tr>
<td>TACAIR</td>
<td>Tactical air (fighter-bomber strike aircraft)</td>
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<td>Tactical Air Control Center</td>
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<td>Tactical Electro-magnetic Ignition Generator</td>
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